(b) whether it is also a fact that the Gangotri Glacier is shrinking every year due to increase in temperature; and

(c) whether Government would adopt necessary measures in collaboration with the other developed nations to check the emission of green house gases?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRI NAMO NARAIN MEENA): (a) According to the Intergovernmental Panel on Climate Change (IPCC) increasing concentrations of green house gases in the atmosphere are responsible for increase in average surface air temperature near the earth's surface and act as a driver of Climate Change including climate system.

(b) As per Geological Survey of India, the Gangotri glacier is shrinking every year with variable rate of recession as has been the case with other Himalayan glaciers. Recession of glaciers is a complex phenomenon and may result due to several factors including rise in temperature, amount and time of snowfall in the catchments area, *etc.* Thus, it is not possible to specify the role played by rise in temperature in this shrinkage. GSI has monitored Gangotri glacier between 1935 and 1996. The average rate of retreat has been 18.80 m per year. Also the studies carried out by Department of Science and Technology, Government of India, funded projects on Gangotri glacier revealed that the glacier is receding at the rate of 17.15 m/year during 1971 to 2004.

(c) The Government of India is a Party to the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol. The Government of India is pro actively participating in Climate Change negotiations both under the Convention and its Protocol alongwith Developed Countries. Further India is actively participating in the Clean Development Mechanism(CDM), whereby project proponents from India sell Certified Emission Reduction certificates to Developed Countries and mitigate their risks, while at the same time contributing to sustainable development of the country. As on date, 375 projects from India have been registered by the Executive Board of CDM.

Assessment on the impact of global warming

1906. SHRI BIRENDRA PRASAD BAISHYA: Will the PRIME MINISTER be pleased to state:

(a) whether Government has made assessment on the impact of global warming in India as being forecasted by various experts and world bodies including United Nations;

(b) if so, the details thereof and response of Government in this regard;

(c) the strategy being finalized for combating the ill effect of the climate change; and

(d) the reasons for delay in responding to the challenge?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRI NAMO NARAIN MEENA): (a) and (b) As a part of the Initial National Communication of India to the United Nations Framework Convention on Climate Change (UNFCCC), studies in regard to

the vulnerability assessment and adaptation to climate change in various areas such as water resources, agriculture, forests, natural eco-systems, coastal zones, health energy and infrastructure have been made.

Further, the Expert Committee on Impact of Climate Change set-up by the Ministry of Environment and Forests in June 2007 assessed the impact of anthropogenic climate change on six areas namely water resources, agriculture, Natural Eco-system, Health, Coastal Zone Management and Climate modeling. The status reports of these sectors have been prepared.

(c) and (d) The National Action Plan on Climate Change (NAPCC) was released by the Prime Minister on 30th June, 2008.The National Action plan outlines eight Mission in specific areas of Solar Energy, Enhanced Energy Efficiency, Sustainable Habitat, Water, Sustaining the Himalayan Eco-system, Green India, Sustainable Agriculture and Strategic knowledge for Climate Change. Eight National Mission form the core of the National Action Plan, representing multi-pronged, long term and integrated strategies for achieving key goals in the context of climate change. The National Missions are to be institutionalized by the respective Ministries and will be implemented as soon as the Mission documents are finalized through inter-sectoral and inter-ministerial consultations.

Demarcation of High Tide Line

1907. SHRI SHANTARAM LAXMAN NAIK: Will the PRIME MINISTER be pleased to state:

(a) whether demarcation of High Tide Line on the the Coastal Survey Plan of sea coast of Goa has been completed;

(b) if so, the method adopted for the purpose, agency/agencies engaged for the purpose;

(c) whether the maps are available for members of public;

(d) whether they are put on web-sites as per the standard norms of e-governance and provisions of Right to Information Act; and

(e) the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRI NAMO NARAIN MEENA): (a) The Government of Goa has delineated the High Tide Line on the Cadastral Survey Maps of the coastal villages in the State of Goa.

(b) The demarcation of High Tide Line was undertaken by the National Institute of Oceanography (NIO), the Directorate of Settlement and Land Records (DSLR), Government of Goa and the Goa Coastal Zone Management Authority (GCZMA). Demarcation of High Tide Line was done in accordance with the Guidelines provided by the Ministry of Environment and Forests (MoEF) in this regard.

(c) As per the information received from the Government of Goa, the Village level cadastral Survey maps with High Tide Line have been provided to each of the coastal village Panchayats in accordance with the directions of the Hon'ble High Court of Bombay at Goa, Panaji Bench in